

## Claims

1. A double-side printing system where printing is made on both sides of a printing paper comprising

an image density detecting means which detects the image densities of input image data of the front side and input image data of the back side, and

a printing density reducing means which reduces both the printing densities for printing the input image data of the front side and the input image data of the back side when at least one of the image densities of the input image data of the front side and the input image data of the back side is not smaller than a predetermined value.

2. A double-side printing system as defined in Claim 1 in which the image data comprises pieces of black data and pieces of white data, and the image density detecting means detects as the image density the proportion of the number of pieces of black data to the total number of the pieces of image data in a predetermined area of the image represented by the image data.

3. A double-side printing system as defined in Claim 1 or 2 in which the image density detecting means divides the image represented by the image data into a plurality of areas to detect the image densities for each of the areas, and the printing density reducing means reduces said printing densities when at least one of the image density detected in the areas is not smaller than a predetermined value.

4. A double-side printing system as defined in any one of Claims 1 to 3 in which the image density detecting means detects, when pieces of image data of at least three pages are input as a set, the image densities of pieces of image data of all the pages input as a set, and the printing density reducing means reduces the printing density for printing the input image data of all the pages.